## High Speed Single Ended Sense Amplifier with Builtin Multiplexer

## **ABSTRACT OF THE DISCLOSURE**

A first sense amp circuit includes a pre-charge circuit, a keeper circuit, a select device and a driver device. The pre-charge circuit coupled to an input data line, the input data line being coupled to an input of a first inverter. The keeper circuit coupled in parallel with the first inverter. The select device coupled to a discharge path of the first inverter. The driver device coupled in parallel to an output data line of the first inverter.